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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,767

02/01/2005

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25944 7590 04/11/2008

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EXAMINER

YOUSEFI, SHAHROUZ

ART UNIT

PAPER NUMBER

2132

MAIL DATE

DELIVERY MODE

04/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,767	Applicant(s) STADELMANN ET AL.	
	Examiner SHAHROUZ YOUSEFI	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/25/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Haverinen et al. (US 7,107,620).

3. With respect to claim 1, Haverinen et al. teaches a method for automatic roaming between heterogeneous WLANs (in WLAN, the roaming from one WLAN hot spot to another is referred to as WLAN roaming service, col. 18, lines 41-43) and/or GSM/GPRS/UMTS networks (the actual type of the telecommunications network is irrelevant. GSM is used as an example, but the network type could as well be Universal Mobile Telecommunication system (UMTS) or GSM with General Packet Radio Service (GPRS), col. 9, lines 56-60), in which method, for authentication, via a wireless interface within a basic service area of a WLAN, a mobile IP node requests access to the WLAN at an access point (authentication of a mobile node connecting to a mobile IP (Internet Protocol) network, col. 1, lines 7-9), the basic service area of the WLAN including one or more access points assigned to an access server, in which method, upon

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request from the access server module (a telecommunications network...a subscriber identity module accessible by the mobile node...an authentication server..., col. 6, lines 53-64), the mobile IP node transmits an IMSI stored on a SIM card of the mobile IP node to the access server, and the IMSI of the IP node is stored in a database of a SIM-RADIUS (mobile nodes are identified by an International Mobile Subscriber Identity (IMSI), col. 10, lines 8-10) characterized

in that, based on the IMSI, the logic IP data channel of the WLAN is user-specifically supplemented towards corresponding GSM data for signal and data channels of a GSM network by means of information stored in an SIM user database (Each WISP can be operated either by a GSM telecommunications network operator or by a private ISP with a roaming agreement with a GSM telecommunications network operator. The roaming agreement is essential for SIM authentication, col. 18, lines 34-38),

in that by means of a SIM gateway module, to perform the authentication of the IP node, the necessary SS7/MAP functions are generated based on the GSM data (The GSM core GSMCORE provides roaming services for a GSM mobile station roaming between various operator networks. Advantageously, the roaming service is implemented using existing SIM cards and the GSM infrastructure, col. 19, lines 9-13),

in that, by means of a SIM user database and SIM gateway module, the SIM-RADIUS module performs the authentication of the mobile IP node at a HLR and/or VLR of a GSM network, based on the IMSI of the SIM card of the mobile node (the roaming user may rely on his customer relationship with his home

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GSM telecommunications network in order to provide authentication and billing in the WLAN, col. 19, lines 39-42), and

in that with successful authentication a location update is performed at the HLR and/or VLR, and the mobile IP node receives a corresponding entry in a customer database of the access server, the WLAN being released for use by the mobile IP node – “Then the GAGW updates (block 659) the user information in the database and stores (block 665) the user data comprising the Kpac_MT” - col. 27, lines 10-12 and also, “As is known from the GSM, the home GSM network stores customer information, such as authentication codes and user identity. Typically, this information is stored in a GSM Home Location Register (HLR) of an MSC. The GSM telecommunications network operator provides the IP based authentication and charging interface for one or several WISP operators, possibly also or only for corporate access solutions”, col. 19, lines 60-67).

4. With respect to claim 2, Haverinen et al. teaches that with successful authentication, in addition to the location update at the HLR and/or VLR, an authorization of the mobile IP node is performed, a corresponding user profile based on the IMSI being downloaded at the HLR and/or VLR (extracts the IMSI and sends the IMSI with an authentication request to nearest MSC. Next, MSC analyses the IMSI to find out the home HLR of the subscriber indicated by the IMSI. Then, the MSC forwards the authentication request to the home HLR. col. 21, lines 45-50).

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5. With respect to claim 3, Haverinen et al. teaches that for the authentication of the mobile IP node, the IMSI stored on the SIM card of the mobile IP node is only used up to one or more of the first authentication stages and that for all further authentication stages the IMSI is replaced by a generated temporary IMSI (Otherwise, a temporary user ID is allocated to the MT identified by the IMSI and the subscriber's data (IMSI and corresponding user ID) is stored (block 619) in a record of a database, col. 26, lines 6-9).
6. With respect to claim 4, Haverinen et al. teaches that the authentication of the mobile IP node is performed by means of an extensible authentication protocol (FIG. 16 illustrates procedure in an authentication system according to an embodiment of the invention. The authentication uses the Extensible Authentication Protocol (EAP), col. 30, lines 5-8).
7. With respect to claim 5, Haverinen et al. teaches that the data stream of the mobile IP node is directed via a mobile radio network service provider during access to the WLAN from the access point (FIG. 1 shows a communication system 10 comprising a mobile IP network MIP having an IP networking MIP...Wireless LAN adapter for communicating with a radio access point over a WLAN radio channel, col. 11, lines 3-12).
8. With respect to claim 6, Haverinen et al. teaches that based on the authentication by means of the IMSI, the mobile radio network service provider issues the corresponding service authorization for use of different services and/or performs the billing of the service availed of (A GSM/GPRS -SIM based user mobility management functionality (user authentication and billing) can be used

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for public WLAN access zone authentication and billing functions. The SIM based authentication provides a relatively trustworthy verification of the subscriber's identity (authentication) for charging of the use. The GSM core GSMCORE provides roaming services for a GSM mobile station roaming between various operator networks..., col. 19, lines 4-21).

9. With respect to claim 7, Haverinen et al. teaches that the SIM user database is connected to a sync module and a sync database for changing or deleting existing user datasets or for inserting new user datasets, the comparison of the databases being carried out periodically and/or initiated by changes in the sync database or through failure of the SIM user database

10. With respect to claim 8, Haverinen et al. teaches that by means of a clearing module 533 for the billing, the billing records of the heterogeneous WLANs are synchronized with the user data and processed based on the GSM-Standard TAP (In the system of FIG. 7, the home operator stores the charging records and sends the bill to the user. The WISP generates a billing record describing the billed services. The billing can be based on any of the known principles or combination of them, for example on flat rate, usage time, number of packets or access bandwidth. The GSM network (GAGW) transmits the WISP originated records to the existing GSM billing system, col. 20, lines 14-21).

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11. Claims 9-16 correspond to claims 1-8, and are therefore rejected for the same reasons as claims 1-8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHROUZ YOUSEFI whose telephone number is (571) 270-3558. The examiner can normally be reached on Monday-Thursday 9:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 5712723799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Y./

Shahrouz Yousefi
Examiner, Art Unit 2132
04/04/2008

/Gilberto Barron Jr/
Supervisory Patent Examiner, Art Unit 2132